

Arbovirus Surveillance Summary 2023-2024

April 2024

Summary

- Two probable cases of **Ross River virus** infection and no cases of **Barmah Forest virus** infection were reported in SESLHD residents in April 2024. No case was acquired within SESLHD.
- Eleven cases of **dengue virus** infection and one case of **malaria** in SESLHD residents were reported in April 2024. All were acquired overseas.
- Mosquito numbers in SESLHD were low in April 2024.

Surveillance of Ross River and Barmah Forest Virus infections

In South Eastern Sydney Local Health District (SESLHD), place of acquisition is investigated for all confirmed and probable cases of Ross River virus and Barmah Forest virus infections.

a. April 2024

- Two cases of **Ross River virus** infection and no cases of **Barmah Forest virus** infection in a SESLHD resident have been notified. A previous probable case has been reclassified to confirmed.

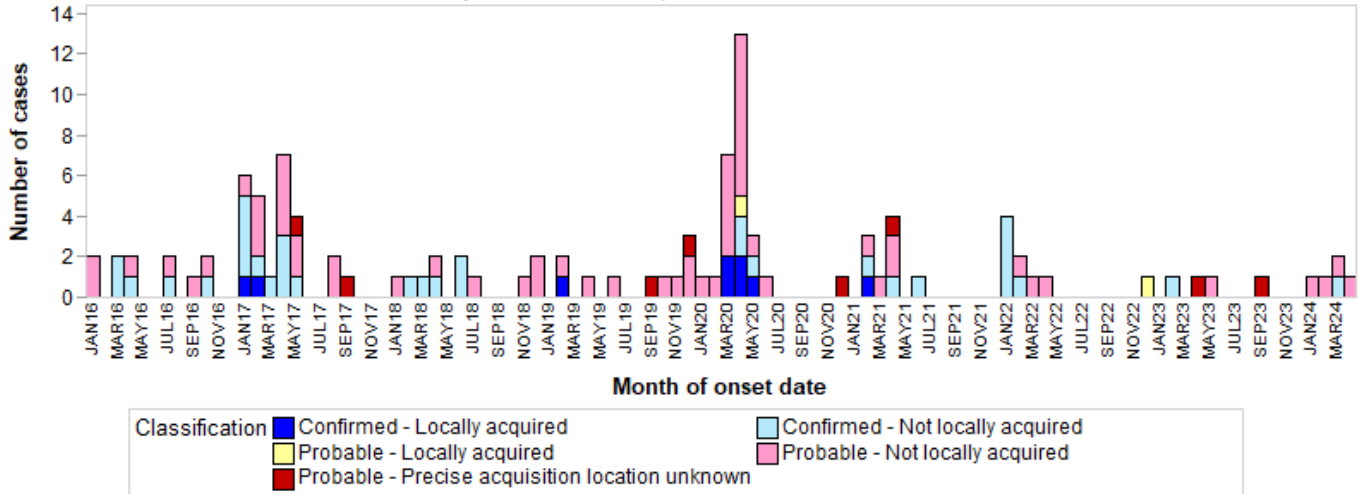
b. This season (1 November 2023 to 30 April 2024)

- One confirmed and five probable cases of **Ross River virus** infection in a SESLHD resident have been notified.
- No cases of **Barmah Forest virus** infection in SESLHD residents have been notified.

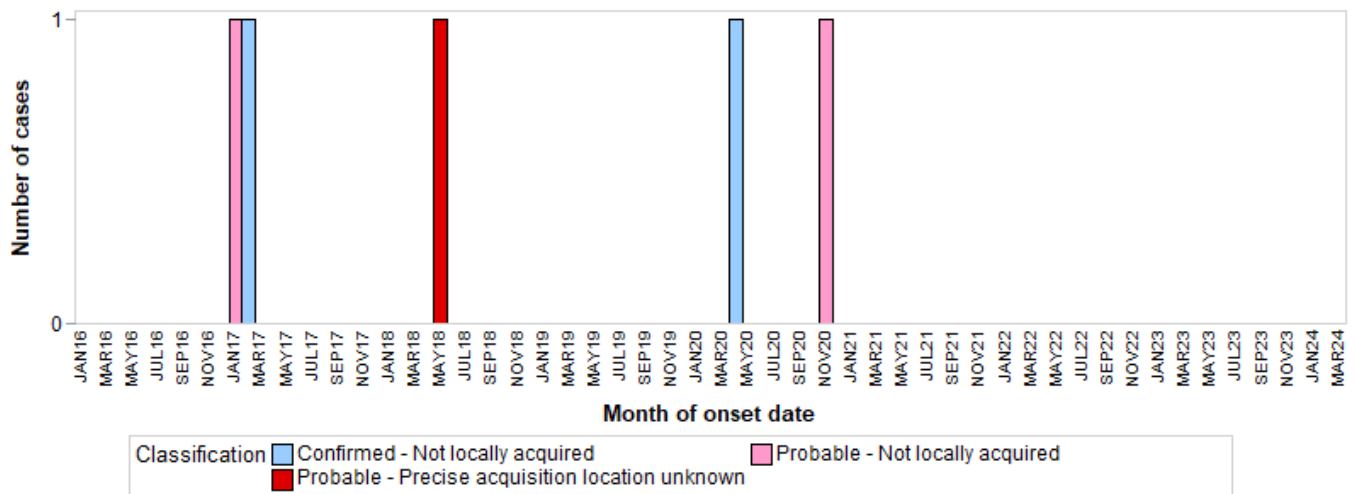
Confirmed and probable cases among South Eastern Sydney LHD residents, since 1 November 2023

	Acquired in SESLHD	Not known to be acquired in SESLHD		
		Acquired elsewhere in Australia	Acquired overseas	Precise acquisition location unknown
Ross River virus				
Confirmed	0	1	0	0
Probable	0	4	0	1
Barmah Forest virus				
Confirmed	0	0	0	0
Probable	0	0	0	0
Total	0	5	0	1

Confirmed and probable Ross River virus infections in South Eastern Sydney LHD residents, by location of acquisition, 2016 to date



Confirmed and probable Barmah Forest virus infections in South Eastern Sydney LHD residents, by location of acquisition, 2016 to date



Summary of other mosquito borne infections not known to be locally transmitted

Eight confirmed and three probable case of **dengue virus** infection have been notified in SESLHD residents this month. All infections were acquired overseas. One confirmed case of **malaria** has been notified in SESLHD residents this month which was acquired overseas.

Confirmed and probable cases among South Eastern Sydney LHD residents, since 1 November 2023

	Acquired in SESLHD	Not known to be acquired in SESLHD		
		Acquired elsewhere in Australia	Acquired overseas	Precise acquisition location unknown
Dengue				
Confirmed	0	0	32	0
Probable	0	0	9	0
Malaria				
Confirmed	0	0	6	0
Probable	0	0	0	0
Chikungunya				
Confirmed	0	0	2	0
Probable	0	0	0	0
Japanese encephalitis				
Confirmed	0	0	0	0
Probable	0	0	0	0
Total	0	0	49	0

Mosquito surveillance in South Eastern Sydney LHD

Mosquito surveillance along the Georges River is conducted from late November to April each year, with surveillance also occurring at Matraville, near Port Botany. The detection of increased mosquito numbers may signal an increased risk of arboviral infection. The predominant species of mosquito in the coastal area of the Georges River which may pose a risk to human health is *Ochlerotatus (Aedes) vigilax*, a known vector for Ross River virus and Barmah Forest virus. Three sites along the Georges River close to SESLHD residents are used for mosquito surveillance: Illawong, Alfords Point and Picnic Point (in SWSLHD).

a. Georges River

- Average mosquito numbers in April 2024 were low at Illawong, Alfords Point and Picnic Point when compared to average April numbers from the previous seasons at these locations.

Mosquito surveillance sites on the Georges River near SESLHD residents (blue overlay highlights SESLHD region)

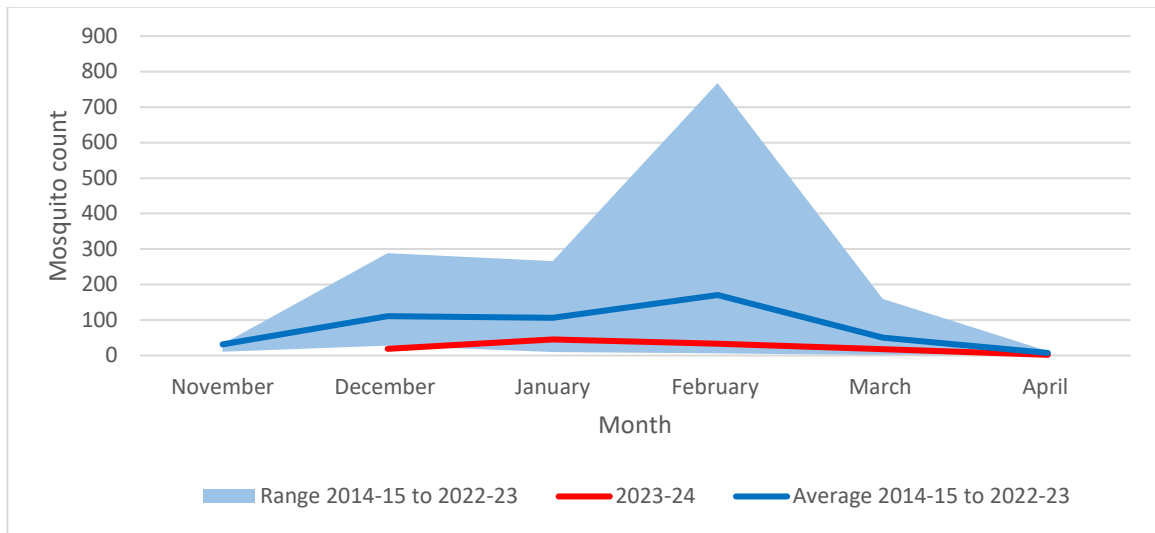


Daily average mosquito numbers, by month, for the current season and 2014 to 2023 seasons

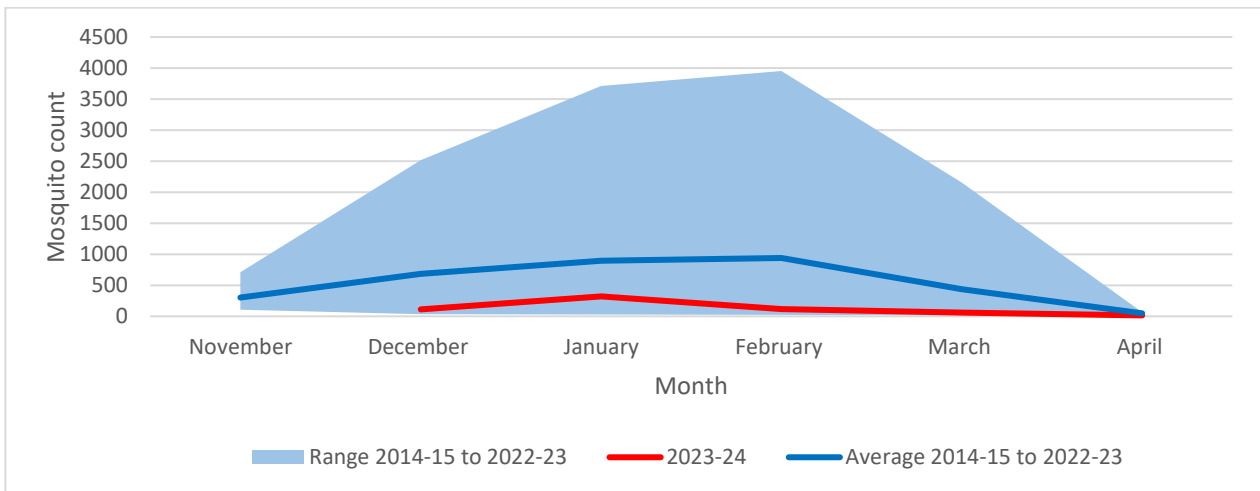
Site	Season	Average mosquito count					
		November	December	January	February	March	April
Illawong	This season	N/A [#]	19	45	33	18	2
	All previous seasons*	(18 - 37)	(11 - 272)	(28 - 283)	(10 - 772)	(6 - 165)	(1 - 13)
Alfords Point	This season	N/A [#]	114	321	118	60	15
	All previous seasons*	(57 - 664)	(105 - 2589)	(33 - 3718)	(27 - 3954)	(26 - 2165)	(14 - 78)
Picnic Point (SWSLHD)	This season	N/A [#]	207	620	808	138	10
	All previous seasons*	(5 - 1157)	(11 - 3006)	(9 - 5639)	(6 - 6672)	(14 - 2624)	(7 - 139)

*2014-15 to 2022-23 range; # N/A - did not trap this month

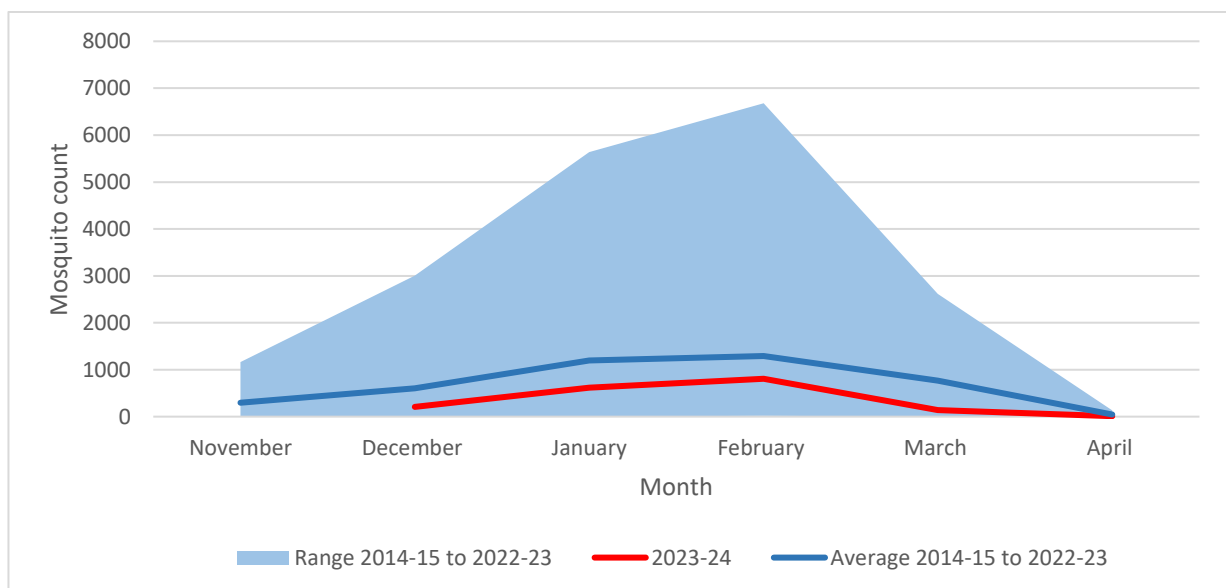
Illawong – average monthly mosquito count, seasons 2014-15 to 2022-23 and 2023-24



Alfords Point – average monthly mosquito count, seasons 2014-15 to 2022-23 and 2023-24



Picnic Point – average monthly mosquito count, seasons 2014-15 to 2022-23 and 2023-24



b. Matraville

From season 2022-23 the Public Health Unit has been conducting mosquito surveillance in Matraville near an international freight terminal. Its purpose is to determine a baseline for the types and abundance of mosquitoes in this part of the District.

Mosquito surveillance site in Matraville



During April 2024, total mosquito counts were similar to last month, and no exotic mosquitoes were detected.

Mosquito numbers as a daily average per month at Matraville, by season

		Average mosquito count					
		November	December	January	February	March	April
Season	2023 - 24	17	41	77	47	39	34
	2022 - 23	82	46	18	75	62	N/A

N/A – Not available